ABSTRACT

1   The immediate grant bus arbiter of this invention is a
2 part in the implementation of a multiple transaction bus
3 system. A bus bridge provides a means to connect two separate
4 busses together and secure data integrity. The bus bridge is
5 defined with clear master-slave protocol. The bus bridge
6 normally involves the use of two arbiters. The arbiter on the
7 primary bus needs to operate differently from the arbiter on
8 the secondary bus due to real system time constraints. This
9 invention defines a bus arbiter that allows for a dominant bus
10 master to receive an immediate grant of control on the bus.
11 This immediate grant bus arbiter never relinquishes the bus if
12 another lower priority master makes a bus request. This makes
13 predictable real time data transfer possible.